

Claims

1. A vaccine composition for the treatment of asthma or COPD, comprising an immunogen that is capable of generating an immune response in a vaccinee against self IL-13 and an adjuvant comprising a combination of an immunostimulatory oligonucleotide containing at least one unmethylated CG motif and a saponin.
2. A vaccine as claimed in claim 1 wherein the immunogen is generates an immune response against human IL13.
3. A vaccine as claimed in claim 2 wherein the immunogen comprises human IL-13 supplemented with foreign T-helper epitopes.
4. A vaccine as claimed in claim 2, wherein the immunogen comprises a non-human IL-13 backbone, substituted with human IL-13 B cell epitopes.
5. A vaccine as claimed in claim 1 wherein the saponin is QS21
6. A vaccine as claimed in claim 1 wherein the immunostimulatory oligonucleotide has the sequence TCG TCG TTT TGT CGT TTT GTC GTT (OLIGO 4).
7. A vaccine as claimed in claim 1 wherein the vaccine comprises a human IL-13 immunogen comprising an orthologous IL-13 sequence, wherein at least one of the orthologous B-cell epitopes are substituted for the equivalent human sequences.